A SYSTEM FOR DISTRIBUTING AND CONTROLLING COLOR REPRODUCTION AT MULTIPLE SITES

ABSTRACT

The system provides for controlling color reproduction of input color image data representing one or more pages or page constituents in a network having nodes (or sites). Each one of the nodes comprises at least one rendering device. The system distributes the input color image data from one of the nodes to other nodes, and provides a data structure (virtual proof) in the network. This data structure has components shared by the nodes and other components present only at each node. Next, the system has means for providing color calibration data at each node characterizing output colors (colorants) of the rendering device of the node, and means for producing at each node, responsive to the color calibration data of the rendering device of the node, information for transforming the input color image data into output color image data at the rendering device of the node. The information is then stored in the data structure in different ones of the shared and other components. Means are provided in the system for transforming at each node the input color image data into output color image data for the rendering device of the node responsive to the information in the data structure. The rendering device of each node renders a color reproduction of the page constituents responsive to the output color image data, wherein colors displayed in the reproduction at the rendering device of each node appear substantially the same within the output colors attainable by the rendering devices. The system further has means for verifying at each node that the information for the rendering device of the node properly transformed the input color image data into the output color image data, and means for revising the information stored in the data structure at the node responsive to results of the verifying means. Shared components of the data structure may also store color preferences selected by a user. The information producing means of the system may further operate responsive to both the color calibration data and the color preferences. The rendering devices in the system can provide color reproductions having three or four colorants, and may provide more than four output colors (color inks).